



Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(use as many sheets as necessary)

Sheet

1

of

**Complete if Known**

Application Number	09/847,736
Filing Date	May 1, 2001
First Named Inventor	WONG, JONATHAN
Art Unit	3739
Examiner Name	SCHOPFER, KENNETH G.
Attorney Docket Number	022001-001900US

**U.S. PATENT DOCUMENTS+**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
	AA	US-				
	AB	US-				
	AC	US-				
	AD	US-				
	AE	US-				
	AF	US-				
	AG	US-				
	AH	US-				
	AI	US-				
	AJ	US-				
	AK	US-				

RECEIVED  
NOV 07 2003  
TECHNOLOGY CENTER R37C

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document			Publication Date MM- DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
	AL	WO	98/25666	A1	COOPER ET AL.	06-18-1998		<input type="checkbox"/>
	AM	WO	97/15240	A1	BRANT ET AL.	05-01-1997		<input type="checkbox"/>
	AN	DE	43 10 842	C2	GRALOWICZ ET AL.	01-25-1995		<input type="checkbox"/>
	AO	WO	94/26167	A1	JENSEN	11-24-1994		<input type="checkbox"/>
	AP	WO	94/18881	A1	STERMAN ET AL.	01-10-1994		<input type="checkbox"/>
	AQ	WO	92/20295	A1	STERMAN ET AL.	09-01-1994		<input type="checkbox"/>
	AR	DE	9204118.3	U1	ZEISS	07-02-1992		<input type="checkbox"/>
	AS	EP	0 776 738	A2	GREEN	06-04-1997		<input type="checkbox"/>
	AT	WO	93/13916	A1	GREEN	07-22-1993		<input type="checkbox"/>
	AU	WO	91/04711	A1	HENRION ET AL.	04-18-1991		<input type="checkbox"/>
	AV	EP	0 424 687	A1	BAUM ET AL.	05-02-1991		<input type="checkbox"/>
	AW	EP	0 239 409	A1	FUNAKUBO ET AL.	09-30-1987		<input type="checkbox"/>

Examiner  
Signature

B. FLANAGAN

Date  
Considered

12/15/03

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Kind Codes of U.S. Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.  
60073472 v1



Substitute for form 1449B/PTO		<b>Complete if Known</b>		
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		Application Number	09/847,736	
		Filing Date	May 1, 2001	
		First Named Inventor	WONG, JONATHAN	
		Art Unit	3739	
		Examiner Name	SCHOPFER, KENNETH G.	
Sheet	2	of	Attorney Docket Number	022001-001900US

RECEIVED  
NOV 07 2003  
TECHNOLOGY CENTER #3709

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
BZ	AX	Ned S. Rasor and JW Sprickler, <u>Remotely Manned Systems Exploration and Operation in Space</u> "Endocorporeal Surgery Using Remote Manipulators," California Institute of Technology, 1973. pp 483-492.	
	AY	Arthur D. Alexander, III, <u>Remotely Manned Systems Exploration and Operation in Space</u> , "A Survey Study of Teleoperators, Robotics, and Remote Systems Technology," California Institute of Technology (1973) pp.449-458	
	AZ	Arthur D. Alexander, III, "Impacts of Telemation on Modern Society," On the Theory and Practice of Robots and Manipulators, Int'l. Centre for Mechanical Sciences, Vol. II (1974) pp. 121-136.	
	AAA	Transcript of video entitled "Telepresence Surgery - The Future of Minimally Invasive Medicine," presented by SRI at the 3rd World Congress of Endoscopic Surgery in Bordeaux on June 18-20, 1992, Washington on April 9, 1992, and in San Diego, CA on June 4-7, 1992, 3 pgs.	
	ABB	Statutory Declaration of Dr. Philip S. Green, presenter of the video (above) entitled "Telepresence Surgery - The Future of Minimally Invasive Medicine."	
	ACC	P. Green et al., Abstract of a presentation "Telepresence: Advanced Teleoperator Technology for Minimally Invasive Surgery," given at "Medicine Meets Virtual Reality" symposium by The Plastic Surgery Research Foundation and Continuing Medical Educ., UC - San Diego, in San Diego, CA, June 4-7, 1992.	
	ADD	P. Green et al., Abstract No. 704 of a presentation "Telepresence: Advanced Teleoperator Technology for Minimally Invasive Surgery," given at the 3rd World Congress of Endoscopic Surgery in Bordeaux, June 18-20, 1992.	
	AEE	Colin Besant et al., Abstract No. 5 of a presentation "Camera Control for Laparoscopic Surgery by Speech-Recognizing Robot: Constant Attention and Better Use of Personnel," Dept. of Computer-Aided Manufacture, Imperial College of Science, Technology, and Medicine, London England.	
	AFF	Preisling et al., "A Literature Review: Robots in Medicine," <u>IEEE - Eng. in Med. &amp; Bio.</u> , June 1991, pp. 13-22 & 71.	
	AGG	Corocoran, E., "Robots for the Operating Room," <u>The New York Times</u> , Sun. July 19, 1992, §3, p. 9, Col. 1	
	AHH	Taylor, R.H., "Taming the Bull: Safety in a Precise Surgical Robot," <u>IEEE</u> , 1991, p. 865-871.	
	AI	Krishnan, S.M., et al., Abstract No. 276 of a presentation "Design Considerations of a New Generation Endoscope Using Robotics and Computer Vision Technology," Nayang Tech. Univ. and Dept. of Surgery, Nat'l. Univ. Hospital, Singapore, given at the 3rd World Congress of Endoscopic Surgery in Bordeaux, CA, June 18-20, 1992.	
	AJJ	Abstract entitled "3-D Vision Technology Applied to Advanced Minimally Invasive Surgery Systems," given at the 3rd World Congress of Endoscopic Surgery in Bordeaux, June 18-20, 1992.	
	AKK	Tendick, F. et al., "Analysis of the Surgeon's Grasp for Telerobotic Surgical Manipulation," <u>IEEE Eng. in Med. and Biol.</u> , 11th Annual Int'l. Conf., (1989) pp. 914-915.	
BZ	ALL	Das, H. et al., "Kinematic Control and Visual Display of Redundant Teleoperators," <u>IEEE</u> , 1989 IEEE International Conference on Systems, Man, and Cybernetics, Nov. 14-17, 1989, Cambridge, MA, pp. 1072-1077	

Examiner Signature	B. FLANAGAN	Date Considered	12/15/03
--------------------	-------------	-----------------	----------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



<b>Substitute for form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	09/847,736		
		Filing Date	May 1, 2001		
		First Named Inventor	WONG, JONATHAN		
		Art Unit	3739		
		Examiner Name	SCHOPFER, KENNETH G.		
Sheet	3	of		Attorney Docket Number	022001-001900US

RECEIVED

NOV 07 2003

TECHNOLOGY CENTER R3700

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
B	AMM	LaValle, S., "A New Systems For Computer Assisted Neurosurgery," <u>IEEE Eng. in Med. and Biol.</u> , Proceedings of the Annual Int'l. Conf. of IEEE Engg. in Med. and Biol. - Vol. 11, Nov. 9-12, 1989, pp. 926-927	
	ANN	Gayed, M. Ben et al., "Systems Science - Vol 13, No. 1-2: An Advanced Control Micromanipulator for Surgical Applications," 1987, pp. 23-34.	
	AOO	Sabatini, A. M., et al., "Medical Applications of Robotics: Force Feedback-Based Telemicromanipulation for Robot Surgery on Soft Tissues," <u>IEEE Engg. in Med. and Biol.</u> 1989, pp. 890-891.	
	APP	Inque et al., "Six-axis Bilateral Control of an Articulated Slave Manipulator Using a Cartesian Master Manipulator," <u>Advanced Robotics</u> , 4, No. 2, 1990, pp. 139-150.	
	AQQ	Majima et al., "On a Micro-Manipulator for Medical Application: Stability Consideration of its Bilateral Controller," <u>Mechatronics</u> 1991, pp. 293-309.	
	ARR	NASA Tech Briefs (1991) - "Anthropomorphic Remote Manipulator"	
	ASS	Bejczy et al., "Controlling Remote Manipulating through Kinesthetic Coupling," <u>Computers in Mechanical Engg.</u> , July 1983, pp. 48-60.	
	ATT	Charles et al., "Design of a Surgeon-Machine Interface for Teleoperated Microsurgery," <u>IEEE Engg. in Med. and Biol.</u> , 1989, pp. 883-884.	
	AUU	Dolan, et al., "A Robot in an Operating Room: A Bull in a China Shop?," <u>IEEE Engg. in Med. and Biol.</u> , 1987, pp. 1096-1097.	
	AVV	Abstract entitled "Concept and Experimental Application of a Surgical Robotic System the Steerable MIS Instrument SMI," given at the 3rd World Congress of Endoscopic Surgery in Bordeaux, June 18-20, 1992.	
	AWW	Abstract of a presentation given at the 3rd World Congress of Endoscopic Surgery in Bordeaux, June 18-20, 1992.	
	AXX	Abstract entitled "A Pneumatic Controlled Sewing Device for Endoscopic Application the MIS Sewing Instrument MSI," 3rd World Congress of Endoscopic Surgery in Bordeaux, June 18-20, 1992.	
	AYY	Abstract No. 826 of a presentation given at the 3rd World Congress of Endoscopic Surgery in Bordeaux, June 18-20, 1992.	
	AZZ	Abstract No. 835 of a presentation given at the 3rd World Congress of Endoscopic Surgery in Bordeaux, June 18-20, 1992.	
	AAAA	Abstract of a presentation given at the 3rd World Congress of Endoscopic Surgery in Bordeaux, June 18-20, 1992.	
	ABBB	Vibet C., "Properties of Master-Slave Robots," <u>Motorcon '87</u> , Hannover, April 2-4, 1987, pp. 309-314.	
B	ACCC	Tejima, et al., "A New Microsurgical Robot System for Corneal Transplantation," <u>Precision Machinery</u> , 1988, Vol. 2, pp. 1-9.	

Examiner Signature	B. FLANAGAN	Date Considered	12/15/03
--------------------	-------------	-----------------	----------

\* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.



<b>Substitute for form 1449B/PTO</b>  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (use as many sheets as necessary)		<b>Complete if Known</b>			
		Application Number	09/847,736		
		Filing Date	May 1, 2001		
		First Named Inventor	WONG, JONATHAN		
		Art Unit	3739		
		Examiner Name	SCHOPFER, KENNETH G.		
Sheet	4	of		Attorney Docket Number	022001-001900US

**RECEIVED**

NOV 07 2003

TECHNOLOGY CENTER R9700

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
BZ	ADDD	Kazerooni, "Human/Robot Interaction via the Transfer of Power of Information Signals - Part I: Dynamics Control Analysis," <u>IEEE</u> , 1989, pp. 1632-1640.	
	AEEE	Colgate, J. Edwards, "Power and Impedance Scaling in Bilateral Manipulation," <u>IEEE</u> , 1991, pp. 2292-2297.	
	AFFF	Guerrouad et al., "Medical Applications of Robotics: S.M.O.S.: Stereotaxical Microtelmanipulator for Ocular Surgery," <u>IEEE Engg. in Med. and Biol.</u> , 1989, pp. 879-880.	
	AGGG	Trevelyan, et al., "Chapter 2: Motion Control for a Sheep Shearing Robot," Proceedings of the 1st Int'l. Symposium on Robotics Research, MIT, Cambridge, MA 1983, pp. 175-190.	
	AHHH	Thring, M.W., "Robots and Telechirs: Manipulators with Memory; Remote Manipulators; Machine Limbs for the Handicapped," Wiley & Sons, 1983.	
	AIII	Mair, Gordon M., "Industrial Robotics: Kinematic Considerations," Prentice Hall, 1988, pp. 41-43, 49-50, 54, 2-3-209.	
	AJJJ	Wolf et al., "Student Reference Manual for Electronic Instrumentation Laboratories," Prentice Hall, 1990, pp. 498-499.	
BZ	AKKK	Taubes, Gary, "Surgery in Cyberspace," <u>Discover</u> , December 1994, pp. 85-92.	

Examiner Signature	B. FLANAGAN	Date Considered	12/15/03
--------------------	-------------	-----------------	----------

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached.